

### Listing of the Claims

1. (Currently Amended) A magnetic resonance imaging system including a gradient coil system comprising an inner coil configuration (~~1,2,3~~) and an outer coil configuration (~~4,5,6~~) that is positioned substantially coaxially with said inner coil configuration, both coil configurations (~~1,2,3,4,5,6~~) being attached to a tubular body (~~7~~) located between said two coil configurations and extending substantially coaxially with both said coil configurations, ~~characterized in that~~ wherein said tubular body (~~7~~) comprises stainless steel rods (~~40~~) which are positioned substantially in axial direction.
2. (Currently Amended) A system as claimed in claim 1, ~~characterized in that~~ wherein stainless steel rods (~~40~~) are present in the central portion of the tubular body (~~7~~).
3. (Currently Amended) A system as claimed in ~~any one of the preceding claims~~ 1, ~~characterized in that~~ wherein stainless steel rods (~~40~~) extend substantially over the entire length of said tubular body (~~7~~).
4. (Currently Amended) A system as claimed in ~~any one of the preceding claims~~ 1, ~~characterized in that~~ wherein said stainless steel rods (~~40~~) are connected to each other at both ends (~~14~~) of each rod (~~40~~).
5. (Currently Amended) A system as claimed in ~~any one of the preceding claims~~ 1, ~~characterized in that~~ wherein said tubular body (~~7~~) comprises a stainless steel cylindrical wall (~~12~~) having axial slits (~~13~~).
6. (Currently Amended) A system as claimed in ~~any one of the preceding claims~~ 1, ~~characterized in that~~ wherein said stainless steel rods (~~40~~) are strips positioned substantially in a cylindrical plane (~~12,16~~).

7. (Currently Amended            A system as claimed in ~~any one of the preceding claims~~1, ~~characterized in that~~wherein a plate-like element (15) is wound into a spiral shape in order to form a cylindrical wall (16), such that said plate-like element (15) comprises substantially parallel stainless steel strips, the stainless steel strips extending in substantially axial direction after the cylindrical wall (16) has been formed.

8. (Currently Amended            A system as claimed in ~~any one of the preceding claims~~1, ~~characterized in that~~wherein at least some of said rods (10) comprise cooling channels (18) for guiding a cooling medium.

9. (Currently Amended            A system as claimed in ~~any one of the preceding claims~~1, ~~characterized in that~~wherein at least some of said rods (10) comprise an axially extending space (19) for accommodating pieces of shim iron.